Claims

1. Method for determining a selection vector which represents a possible displacement vector for a displacement of an image area (1) from a first position (P1) in a first image (B1) to a second position (P2) in a second image (B2), wherein the method comprises the following procedural steps:

a) Supplying a set of prediction vectors (V1, V2, V3, V4);

b) Supplying at least one fixed set of test vectors (T1, T2, T3);

c) Selecting at least one test vector from the set of test vectors (T1, T2, T3, T4), and performing an image comparison between a first image area (1) in the first image (B1) and a second image area (2) in the second image (B2) in order to obtain an image comparison result B(Tn), wherein the position of the second image area (2) is displaced relative to the first image area (1) by at least one selected test vector;

d) Comparing the at least one selected test vector (T1-T3) with at least one selected prediction vector (V1-V4) in order to obtain at least one vector comparison result V(Tn, Vn) for each selected test vector (T1-T3);

e) Supplying at least one quality characteristic (G(Tn, Vn)) for each selected test vector (T1-T3) from the image comparison result obtained for this test vector (T1-T3), and from a vector comparison result (V(Tn,Vn));

f) Determining a ranking order of the quality characteristics (G(Tn,Vn)); and

g) Selecting one of the test vectors (T1-T3) based on the ranking order of the quality characteristics as the selection vector.

2. Method according to Claim 1, wherein one set of test vectors is assigned to each prediction vector (V1-V4) or to one group each of the prediction vectors (V1-V4), from which set the test vector to perform the vector comparison is selected.

3. Method according to Claim 1, wherein during the comparison step d) a measure of the difference between each of the selected test vectors (T1-T3) and the at least one selected prediction vector (V1-V4) is determined.

4. Method according to Claims 1, 2, or 3, wherein step c) is implemented for all the test vectors (T1, T2, T3).

5. Method according to one of Claims 1 through 4, wherein step d) is implemented for all the prediction vectors (V1-V4).

6. Method according to one of the foregoing claims, wherein the image comparison result (B(in)) assigned to one of the selected test vectors and the vector comparison result assigned to one of the selected motion vectors are linked in such a way that given the same image comparison result (B(in)) the quality characteristic G(Tn, Vn) improves the less the test vector (T1-T3) and the selected prediction vector (V1-V4) differ from each other.

7. Method according to one of the foregoing claims, wherein at least one test vector (V1-V4) is determined for each prediction vector (V1-V4), wherein the selection vector is selected from the group of test vectors determined thereby.

8. Method according to one of the foregoing claims, wherein the procedural steps c) through f) are performed at least twice, wherein according to procedural step g) at least one test vector (Ti) is selected based on the ranking order of the quality characteristics (G(Tn, Vn)), and wherein based on this at least one test vector (Ti) a set of test vectors (112) is generated for the subsequent image comparison in step c).

9. Method according to Claim 8, wherein for each prediction vector during the performance of steps c) through f) one test vector is determined, based on which a set of test vectors for the subsequent image comparison is generated.

10. Method according to Claims 8 or 9, wherein from the at least one test vector (Ti) selected according to procedural step g), one test vector (Ti1-Ti4) of the set of test vectors (112) is generated for the subsequent image comparison by vectorial addition of at least one modification vector (M1-M4).

11. Method according to Claim 10, wherein from the at least one test vector (Ti) selected according to procedural step g) multiple test vectors (Ti1-Ti4) are respectively generated by vectorial addition of multiple modification vectors (M1-M4).

12. Method according to Claim 11, wherein, with each repetition of procedural steps c) through f), modification vectors are employed which match in terms of their direction, but the absolute value of which becomes smaller from iteration step to iteration step.

13. Method according to Claim 11, wherein the modification vectors are a function of the previously determined quality characteristic assigned to the selected test vector.

14. Method according to Claim 13, wherein the absolute value of the modification vector becomes smaller as the quality characteristic improves.

15. Method for supplying a set of selection vectors by employing a set of prediction vectors (101) and a set of test vectors (102), wherein only those test vectors are employed as selection vectors (101) which have been determined by a method according to one of Claims 1 through 14.

16. Method for supplying a set of selection vectors by employing a set of prediction vectors (101 and a set of test vectors (102), wherein only those test vectors are employed as selection vectors that have been determined by a method according to one of Claims 1 through 15, and wherein prediction vectors continue to be employed as selection vectors.

17. Method according to one of Claims 10 or 11, wherein the selection vectors are stored as new prediction vectors.

18. Method according to Claims 10 or 11, wherein the selection vectors are preset or are modified according to a random scheme and stored as new prediction vectors.